



# SOLAR FACILITIES

The new Renewable Energy Approval will support the Green Energy Act and the Ontario Government's climate change action plan that will reduce greenhouse gas emissions, increase renewable energy generation and conservation and create thousands of green jobs in Ontario.

## Solar energy

Solar power depends directly on sunlight to generate electricity. The most common form of solar electricity generation in use today is the photovoltaic cell, or "solar PV". A solar PV panel consists of several layers. The top one is glass that protects the PV cell from the weather and has a special coating to reduce reflected light from the panel. Inside the cell is a grid, usually made of a metal that conducts electricity. Openings in the grid let sunlight reach the silicon layers underneath, where electricity is generated.

## Renewable Energy Approval (REA)

Roof-top or wall mounted solar facilities of any size are exempt from an REA. Facilities mounted on buildings may require a municipal building permit. For further information, contact the local building department.



1 kW wall-mounted solar array



Large ground-mounted solar PV facility

Small scale ground mounted solar facilities **10 kW and under** will not require an REA. Ground mounted solar facilities **over 10 kW** require an REA and also require a noise study. 10 kW is the average energy requirement of 5 to 10 households.

## Noise requirements

As part of their application for an REA, solar projects have to submit a noise study demonstrating they do not exceed a 40 decibel noise level (approximately the noise level experienced in a quiet office or library). This noise study assesses the potential noise impacts for a residence or other nearby noise receptors due to sound emitted by the solar facility's electrical equipment (e.g. inverters, transformers).



2 kW ground-mounted solar array

## General Information

The Renewable Energy Approval integrates study requirements under the Environmental Assessment Act and provincial standards under the Environmental Protection Act. The improved process replaces what was largely an applicant-driven environmental assessment framework with clear provincial rules and requirements. The REA process continues to ensure transparent decision-making and mandatory public consultation.

## Consultation

The REA has established clear requirements around public consultation and community awareness. Applicants must notify nearby landowners and the community early in the planning stages, and hold at least two public consultation meetings. They must also consult with municipalities on matters related to servicing and infrastructure, and must engage Aboriginal communities early in the REA process to ensure that any impacts to Aboriginal or treaty rights are addressed.

To learn more, visit:

**Ministry of the Environment**

[www.ene.gov.on.ca](http://www.ene.gov.on.ca)

**Renewable Energy Facilitation Office**

1-877-440-REFO (7336)

[REFO@ontario.ca](mailto:REFO@ontario.ca)



## Appealing an Approval Decision

Anyone can appeal the approval of a proposed renewable energy project. The Environmental Review Tribunal will have six months to assess whether or not the proposed project will cause serious harm to human health or serious and irreversible harm to plant life, animal life or the natural environment.

This balances the need for certainty and timeliness of approvals with the need for legitimate concerns to be heard and addressed.

For more information on the Environmental Review Tribunal and how to appeal, please visit [www.ert.gov.on.ca](http://www.ert.gov.on.ca).

